



UCSC

University of Colombo, Sri Lanka

University of Colombo School of Computing



**DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY
(EXTERNAL)**

Academic Year 2024 — 2nd Year Examination — Semester 4

IT4306 — Information Technology Project Management

Part 1 - Multiple Choice Question Paper

(2 Hours for both Part 1 and Part 2)

Important Instructions

- This paper has **two (2) parts, Part 1 and Part 2**.
- The total duration of **both Part 1 and Part 2 is 2 hours**.
- The final mark for the paper will be determined by averaging the scores of Part 1 and Part 2, each of which is graded out of **100**.
- The medium of instructions and questions is English.
- This paper (Part 1) has **25 MCQ questions** on **6 pages**. Answer **all** questions.
- Each question will have **5 (five)** choices with **ONE OR MORE** correct answers.
- There will be a penalty for incorrect responses to discourage guessing.
- The mark given for a question will vary from -1 (All the incorrect choices are marked & no correct choices are marked) to +1 (All the correct choices are marked & no incorrect choices are marked). However, **the minimum mark per question would be zero**.
- Answers should be marked on the **special answer sheet** provided.
- Note that questions appear on both sides of the paper. If a page or part of a page is not printed, please inform the supervisor/invigilator immediately.
- Mark the correct choices on the question paper first and then transfer them to the given answer sheet which will be machine marked. **Please completely read and follow the instructions given on the other side of the answer sheet before you shade your correct choices**.
- Any electronic device capable of storing and retrieving text, including electronic dictionaries, smartwatches, and mobile phones, is **not** allowed. **Calculators are not allowed**.
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1. Which of the following is a/are knowledge area(s) of project management?
 - a. Cost Management
 - b. Communication Management
 - c. Shareholder Management
 - d. Stakeholder Management
 - e. Total Quality Management

2. Which of the following is a/are question(s) asked in project portfolio management?
 - a. Are we carrying out projects well?
 - b. Are we investing in the right areas?
 - c. Are we working on the right projects?
 - d. Are projects on time and budget?
 - e. Do project stakeholders know what they should be doing?

3. Which leadership style is associated with inspiring others based on their enthusiasm and confidence?
 - a. Charismatic
 - b. Interactional
 - c. Laissez-faire
 - d. Servant Leader
 - e. Transactional

4. Which of the following is a/are potential advantage(s) of good project management?
 - a. Lower cost of capital
 - b. Lower profit margins
 - c. Higher profit margins
 - d. Higher morale of the workforce
 - e. Shorter development times

5. Which of the following are the components of the three-sphere model?
 - a. Business
 - b. Capital
 - c. Organization
 - d. Technology
 - e. Revenue

6. Which of the following best describe(s) the Human Resource Frame in the Four Frames of Organizations?
 - a. Centers on power dynamics, conflict resolution, and coalitions
 - b. Concentrates on financial performance and profit maximization
 - c. Focuses on formal roles, responsibilities, and organizational hierarchy
 - d. Emphasizes people's needs, skills, relationships, and empowerment
 - e. Highlights organizational culture, rituals, and shared meaning

7. Which frames in the Four Frames model are concerned with the culture and internal politics of an organization?
 - a. Economic Frame
 - b. Human Resource Frame
 - c. Political Frame
 - d. Structural Frame
 - e. Symbolic Frame
8. How are employees typically grouped in a functional organizational structure?
 - a. By assembly lines
 - b. By customer segments
 - c. By geographical regions
 - d. By product lines
 - e. By specialized functions
9. What is a key characteristic of a matrix organizational structure?
 - a. Departments operate completely independently
 - b. Employees may report to both a functional manager and a project manager
 - c. Employees report to only one manager
 - d. It eliminates the need for project managers
 - e. It focuses only on temporary project teams
10. Which product lifecycle would be appropriate to develop a product with a low degree of change in requirements and a high frequency of delivery?
 - a. Adaptive lifecycle
 - b. Hybrid lifecycle
 - c. Incremental lifecycle
 - d. Iterative lifecycle
 - e. Predictive lifecycle
11. A software company in Sri Lanka decides to contract a firm in the United States to develop part of its software application. At the same time, the company hires a local third-party company in Colombo to handle customer support. Which of the following statements is/are true based on this scenario?
 - a. Both activities are examples of outsourcing.
 - b. Both the development work in the United States and the customer support in Colombo are examples of offshoring.
 - c. Offshoring always involves outsourcing, but outsourcing does not always involve offshoring.
 - d. The customer support service provided by the local third-party company is an example of outsourcing.
 - e. The development work done in the United States is an example of offshoring.

12. Which of the following elements is/are associated with the Scrum framework?
- Daily stand-up meeting
 - Gantt chart
 - Product owner
 - Sprint backlog
 - Waterfall model
13. Which of the following statements accurately describes key aspects of the Six Sigma methodology?
- Six Sigma aims to reduce process variation and defects.
 - Six Sigma is only applicable to manufacturing industries.
 - Six Sigma projects often use statistical tools for quality improvement.
 - The DMAIC cycle stands for Define, Measure, Analyze, Improve, Control.
 - The main goal of Six Sigma is to increase the number of deliverables per sprint.
14. A startup IT company is evaluating a project to build a custom enterprise software solution. The project requires an initial investment of 500,000 LKR. The discounted costs for the three years of the project are 250,000 LKR, 150,000 LKR, and 100,000 LKR, respectively. Which of the following options is/are true regarding the project?
- The Internal Rate of Return (IRR) is equal to the discount rate
 - The Net Present Value (NPV) of the project is zero
 - The project generates a positive NPV and earns a return above the cost of capital
 - The project is financially viable and should be accepted
 - The total present value of inflows equals the initial investment
15. A company invests 2,000,000 LKR in developing a new software product. After one year, the project generates a net profit of 400,000 LKR. What is the Return on Investment (ROI) of the project?
- 10%
 - 15%
 - 20%
 - 25%
 - 30%
16. Consider two projects, X and Y, where the initial investments are 1,000,000 LKR, respectively. Expected cash flows for projects X and Y over three years are 1,200,000 LKR and 1,000,000 LKR. Which of the following statements is/are true?
- Both projects have the same total undiscounted cash inflows.
 - Project X has a higher Net Present Value (NPV) than Project Y.
 - Project X's cash inflows are more evenly distributed over time than those of Project Y.
 - Project Y has a higher Return on Investment (ROI) than Project X.
 - Project Y will always be preferred if the company prioritizes early returns.

17. Which of the following is a/are process(es) involved in project scope management?
- a. Collecting requirements
 - b. Controlling scope
 - c. Creating the work breakdown structure
 - d. Designing the software architecture
 - e. Validating scope
18. Which of the following statements about the WBS is/are correct?
- a. WBS breaks down the project into smaller, manageable components called work packages.
 - b. WBS ensures clear responsibility assignment and better project control.
 - c. WBS helps in estimating costs and durations more accurately.
 - d. WBS is a tool primarily used to monitor project risks.
 - e. WBS includes detailed task schedules and resource assignments.
19. Which of the following statements about Gantt charts is/are true?
- a. Gantt charts allow easy identification of task delays and scheduling conflicts.
 - b. Gantt charts are primarily used to estimate project costs.
 - c. Gantt charts display tasks along a timeline with their start and finish dates.
 - d. Gantt charts help visualize task overlaps and project progress.
 - e. Gantt charts show task dependencies and critical paths by default.
20. Which of the following statements about slipped milestone is/are true?
- a. It can signal potential schedule delays that may impact dependent tasks.
 - b. It indicates that a project milestone was not completed by its originally planned date.
 - c. It means the milestone was removed from the project scope.
 - d. It reflects the poor financial performance of the project.
 - e. It is a warning that corrective actions may be needed to bring the project back on track.
21. Which of the following is/are not a part of the SMART criteria?
- a. Asserted
 - b. Measurable
 - c. Realistic
 - d. Specification
 - e. Time-framed

22. A project manager, after performing Critical Path Analysis (CPA), finds that the project will exceed the client's required delivery date by 10 days. Which of the following actions by the project manager is a/are valid way(s) to shorten the project duration using CPA?
- Add additional developers to tasks on the critical path to reduce their durations
 - Delay non-critical tasks to allocate more resources to critical path tasks.
 - Increase the budget for marketing activities scheduled after project completion.
 - Overlap the design and development phases, even though they were initially sequential.
 - Reduce the scope of a critical path task with client approval to shorten its duration.
23. During stakeholder analysis, the project manager identifies different individuals and groups who may impact or be impacted by the project. Which of the following is/are an appropriate output or use of stakeholder analysis?
- Categorizing stakeholders to plan engagement strategies
 - Creating detailed task schedules for stakeholders
 - Determining communication requirements for key stakeholders
 - Identifying stakeholders' levels of interest and influence
 - Listing resources required for each stakeholder group
24. Which of the following pieces of information would typically be included in a stakeholder register?
- Classification (e.g., internal, external, supporter, resistor)
 - Detailed risk response plans
 - Name and contact information of each stakeholder
 - Stakeholders' expected monetary contributions
 - Stakeholders' interest, influence, and impact level
25. In a fixed-price contract with a price ceiling, the Point of Total Assumption (PTA) is the:
- Maximum cost the buyer will pay before the contractor bears all additional costs
 - Minimum cost the contractor will accept for completing the project
 - The amount the contractor earns as profit regardless of cost overruns
 - The point where the buyer pays extra fees beyond the contract price
 - The point where the project is completed early
